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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,783	02/05/2002	Albert L. Saari	H836-005-PAT	7525

7590 01/08/2004
WILLIAM FLYNN
P.O. BOX 74
CHANHASSAN, MN 55317

EXAMINER

RIDDLE, KYLE M

ART UNIT	PAPER NUMBER
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3748

DATE MAILED: 01/08/2004

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Remail

Please find below and/or attached an Office communication concerning this application or proceeding.



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10/068,783

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Albert L. Saari

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12/04/2003

WILLIAM FLYNN
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Excelsior, MN 55331

EXAMINER

RIDDLE, KYLE M

ART UNIT

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DATE MAILED: 12/04/2003

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Office Action Summary

Application No.

10/068,783

Applicant(s)

SAARI ET AL.

Examiner

Kyle M. Riddle

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,7-15,18,20-26,29-31,36 and 37 is/are rejected.
- 7) ☒ Claim(s) 2-6,16,17,19,27,28,32-35 and 38-47 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

- Page 10, line 16, "leve1" should read --level-- (the last letter should be an "L", not the number "one");

- Page 18, line 12, "IA" should read --1A--.

Appropriate correction is required.

Claim Objections

2. The use of the trademark Hytrel® in claim 5 and claim 26 is improper and must be removed or amended to recite a generic equivalent thereof. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

3. Claim 24 recites the limitation "the protective case" in page 31, lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

4. Claim 33 recites the limitation "said inorganic polymer thickening agent" in page 32, lines 3-4. There is insufficient antecedent basis for this limitation in the claim.

5. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. Specifically, there are two claim 37s. Beginning with the second listed claim 37, misnumbered claims 37-46 have

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been renumbered 38-47. All references to claim numbers in this action refer to the renumbered claims.

6. Newly renumbered claim 42 is objected to because of the following informalities: Page 33, line 15, "roup" should read --group--. Appropriate correction is required.

7. Newly renumbered claim 47 is objected to because of the following informalities: Page 34, line 14, "propionate" should read --benzoate--. Appropriate correction is required.

Double Patenting

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

10. Claims 14-15, 20, 24, 30-31, and 36 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 12-13, 15, 19, 25-26, and 35, respectively, of prior U.S. Patent No. 5,936,178. This is a double patenting rejection.

Double Patenting

11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible

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harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 19 of U.S. Patent No. 5,936,178. Although the conflicting claims are not identical, they are not patentably distinct from each other because all the essential elements that make up the humidity control device are contained in both claims. Column 4, lines 66-67 suggests the use of humidity control devices in food storage applications and the inclusion of use in a food case is an obvious choice to one of ordinary skill in the art, since many foods require specific humidity control to prevent spoiling or changes of taste.

13. Claim 23 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 18 of U.S. Patent No. 5,936,178. Although the conflicting claims are not identical, they are not patentably distinct from each other because the inclusion of a string foods case versus a string instrument case is not essential to the method steps of the claimed humidity control. It is obvious to one of ordinary skill in the art that the method described would apply to numerous types of cases requiring specific control of the humidity.

14. Claim 25 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 20 of U.S. Patent No. 5,936,178. Although the

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conflicting claims are not identical, they are not patentably distinct from each other because the broadening of the range of thickness of the polymer film from 1 mil to 2 mils is not a substantial difference to one of ordinary skill in the art. Moreover, there is nothing in the record which establishes that the application of such represents a novel or unexpected result (See *In re Kuhle*, 526 F.2d 553, 188 USPQ 7 (CCPA 1975)).

15. Claim 26 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 21 of U.S. Patent No. 5,936,178. Although the conflicting claims are not identical, they are not patentably distinct from each other because the addition of the trademark Hytrel® is improper and should be removed or amended to recite the generic equivalent thereof (see paragraph 2 above).

Claim Rejections - 35 USC § 102

16. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

17. Claims 1, 7-15, 18, 20, 22-26, 29-31, and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Saari (U.S. Patent 5,936,178).

Re claims 1 and 24, Saari discloses a humidity control device comprising a protective case, a water vapor permeable pouch and a thickened saturated salt solution, said case comprising wall means defining an enclosure, said wall means including a plurality of openings through which water vapor may freely move, said pouch being formed of a thin wall polymer film through which water vapor may pass, said thickened saturated salt solution comprising

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water, salt and a thickening agent, said salt being present in an amount between 20 and 75 percent by weight based on the weight of the combination of water and salt, said thickening agent being present in an amount sufficient to thicken the salt solution, said thickened saturated salt solution being contained within the polymeric pouch and sealed from escape from the pouch, said pouch containing the thickened saturated salt solution being contained within the protective case to protect the pouch from rupture (column 8, lines 65-67 with column 9, lines 1-15, and column 10, lines 14-27).

Re claims 7 and 8, Saari discloses the preferred thickening agent being propylene glycol alginate or xanthan (column 7, lines 18-19).

Re claims 9-13, Saari discloses the openings being oval in shape and approximately $1/16^{\text{th}}$ by $1/8^{\text{th}}$ inch (column 6, lines 16-24) with a tubular structure 16 having a pair of removable end caps 17 (column 5, lines 34-35 and column 9, lines 30-34), the case constructed of a polymer and being 2 to 5 inches in length and $5/8^{\text{th}}$ to $3/4^{\text{th}}$ inches in internal diameter with a securing mechanism to the inside of the case (column 5, lines 56-58, column 6, lines 7-8, column 5, lines 39-40, and column 9, lines 35-42).

Re claim 14, Saari discloses a humidity control device for maintaining a desired humidity, said device comprising a protective case, a water vapor permeable pouch and a thickened saturated salt solution, said case comprising wall means defining an enclosure, said wall means including a plurality of openings through which water vapor may freely move, said pouch being formed of a thin wall polymer film through which water vapor may pass, said thickened saturated salt solution comprising water, salt and a thickening agent, said thickening agent being present in an amount sufficient to thicken the salt solution, said salt solution being

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contained within the polymeric pouch and sealed from escape from the pouch, said pouch containing the thickened salt solution, said pouch being contained within the protective case to protect the pouch from rupture (column 9, lines 43-57).

Re claim 15, Saari discloses the maximum range of saturated solution by weight being from 5% to 90% (column 7, lines 3-6).

Re claim 18, Saari discloses the salt solution having a viscosity of 1500-5000 cps (column 7, lines 34-35).

Re claims 20 and 26, Saari discloses the polymer film being high density polyethylene, oriented polystyrene, microporous polyethylene, microfibrous polyethylene, or polyvinylchloride (column 4, lines 66-67 with column 5, lines 1-3).

Re claim 22, Saari discloses films that can have a moisture transfer rate in the range of about 10 to 25 grams or more per 24 hours per 100 square inches of film (column 4, lines 33-36 and lines 42-43).

Re claim 23, Saari discloses a method for controlling the humidity in a case comprising applying a humidity control mechanism to environment in the case, said mechanism including an encased saturated salt solution, said encasement being permeable to water vapor to permit water vapor to leave the salt solution in the adjacent relative humidity is below a desired level and to pick up water vapor if the relative humidity is above a desired level (column 10, lines 7-14).

Re claim 25, Saari discloses the polymer film with a thickness of 0.15 mils to 1 mil or greater (column 6, lines 42-47).

Re claims 29-31, Saari discloses the solution may be a hydrocolloid including soluble gums (alginate, xanthan, pectin), a protein gel (egg, albumen, gelatin), or inorganic polymer

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(silicates) (column 2, lines 50-55), and the thickening agent preferably being propylene glycol alginate and xanthan (column 7, lines 18-19).

Re claim 36, Saari discloses a humidity control device for use in maintaining a desired humidity, said device including a water vapor permeable pouch and a saturated solution, said pouch being formed of a thin wall polymer film through which water vapor may pass, said saturated solution comprising water and solute, said solute being present in an amount of between 20 and 75 percent by weight based on the weight of the combination of water and solute, said solution being contained within the polymeric pouch and sealed from escape from the pouch (column 12, lines 7-16).

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saari in view of El Kabbani et al. (U.S. Patent 6,646,121).

Saari discloses a humidity control device for maintaining a desired humidity, said device comprising a protective case, a water vapor permeable pouch and a thickened saturated salt solution, said case comprising wall means defining an enclosure, said wall means including a plurality of openings through which water vapor may freely move, said pouch being formed of a thin wall polymer film through which water vapor may pass, said thickened saturated salt solution comprising water, salt and a thickening agent, said thickening agent being present in an

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amount sufficient to thicken the salt solution, said salt solution being contained within the polymeric pouch and sealed from escape from the pouch, said pouch containing the thickened salt solution, said pouch being contained within the protective case to protect the pouch from rupture (column 9, lines 43-57). Saari fails to disclose the specific moisture transfer rate cited.

El Kabbani et al. teach a sucralose composition for maintaining the moisture content of a container with a MVTR of the container being not more than 0.1 grams/100 square inches/24 hours (column 4, lines 31-33). It would have been obvious to one having ordinary skill in the art at the time of the invention was made, to have utilized the teaching by El Kabbani et al. in the humidity control device of Saari, since the use thereof would have provided a wider range of moisture content control for multiple purposes.

20. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saari in view of DelDuca et al. (U.S. Patent 6,508,955).

Saari discloses a humidity control device for use in maintaining a desired humidity, said device including a water vapor permeable pouch and a saturated solution, said pouch being formed of a thin wall polymer film through which water vapor may pass, said saturated solution comprising water and solute, said solute being present in an amount of between 20 and 75 percent by weight based on the weight of the combination of water and solute, said solution being contained within the polymeric pouch and sealed from escape from the pouch (column 12, lines 7-16). Saari fails to disclose the use of an oxygen scavenger.

DelDuca et al. teach the use of adding an oxygen scavenger to food package to aid in the absorption of residual oxygen (column 2, lines 23-35). It would have been obvious to one having ordinary skill in the art at the time of the invention was made, to have utilized the

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teaching by DelDuca et al. in the humidity control device of Saari, since the use thereof would have provided a quicker method to remove excess oxygen from the food cases.

Allowable Subject Matter

21. Claims 2-6, 16-17, 19, 27-28, 32-35, 38-47 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and consists of 7 patents.

- Nakamura et al. (U.S. Patent 4,384,972) disclose a foodstuff freshness keeping agents using salt of manganese, iron, cobalt, or nickel.

- Spruill et al. (U.S. Patent 5,037,459) disclose a device for controlling relative humidity with a water vapor permeable membrane packet.

- Venkateshwaran et al. (U.S. Patent 5,885,481) disclose an oxygen scavenging composition with multiple purposes.

- Ferrell (U.S. Patent 5,934,773) discloses a humidifier device containing moisture absorbing packages or pouches.

- Cullen et al. (U.S. Patent 6,139,935) disclose an oxygen absorbing label for different types of containers.

- Saari et al. (U.S. Patent 6,244,432) disclose a humidity control device for gun cases substantially the same as the disclosed invention.

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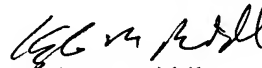
- McKedy (U.S. Patent 6,436,872) discloses an oxygen absorber containing particulate annealed electrolytically reduced iron to include between about 100 mesh and 325 mesh.

Communication


23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyle M. Riddle whose telephone number is (703) 306-3409. The examiner can normally be reached on M-F (07:30-5:00) Second Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (703) 308-2623. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9302.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.


Kyle M. Riddle
Examiner
Art Unit 3748

kmr


THOMAS DENION
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700